

Product Name: Acetyl-CoA

Acetyl-CoA Fluorometric Assay Kit Revision Date: 10/25/2024

Product Data Sheet

K2028 Acetyl-CoA Fluorometric Assay Kit

Kit Contents

Components	K2028-96 assays	Part Number
Black Microtiter Plate	1 x 1 Unit	K2028-C-1
Foil Plate Sealer	3 x 1 Unit	K2028-C-2
Acetyltransferase Positive Control	1 x 200 µL	K2028-C-3
Acetyltransferase Reaction Buffer Concentrate	1 x 100 µL	K2028-C-4
Transferase Detection Solution Concentrate	1 x <mark>15</mark> 0 μL	K2028-C-5
Transferase Assay Buffer Concentrate	1 x 15 mL	K2028-C-6

Introduction

Acetyl CoA is a critical molecule in metabolism. Acetyl CoA is an important molecule in the citric acid cycle to be oxidized for energy production. Also, Acetyl CoA is a key molecule in the biogenic synthesis of acetylcholine, melatonin, heme, sesquiterpenes, polyenes and long-chain fatty acids, precursors to cholesterol and other sterols, flavenoids and other polyketides. Acetyl CoA is also the source of the acetyl group used in histone acetylation.

Acetyl-CoA Fluorometric Assay Kit is a homogeneous mix-and-read fluorescent assay for the determination of any acetyl-CoA dependent acetyltransferase activity.

Key facts

Detection method

Fluorescent

Sample types

Purified protein, Inhibitor compounds



Assay Platform

Microplate reader

Storage

Shipped at conditions

Dry Ice

Appropriate short-term storage conditions

Multi

Appropriate long-term storage conditions

Multi

Storage information

Please refer to protocols

Notes

Acetyltransferase Activity Assay Kit (Fluorometric) is a homogeneous mix-and-read fluorescent assay for the determination of any acetyl-CoA dependent acetyltransferase activity. It is suitable for end-point or kinetic read options, which is ideal for determining mechanism of action, kinetics, and screening candidate compounds. The assay is amendable to HTS and miniaturization.

APE

This assay is a complete kit for the screening of candidate compounds that can alter normal acetyltransferase activity. For use with purified in vitro samples.

Acetylation is an important covalent molecular modification. Originally identified as the method by which certain bacteria were able to deactivate anti-microbial compounds, acetylation is now also known as an important partioning and signaling modification.

Acetyltransferases are enzymes that covalently transfer an acetyl group from a donor molecule (Acetyl CoA) to an acceptor. Acetyl CoA serves as a universal donor while the acceptor varies with the acetyltransferase. Acceptors include histones, kinases, transcription factors, receptors, neurotransmitter precursors like choline and serotonin, and anti-microbial agents like chloramphenicol and fluoroquinones. Acetylation can signal an increase or decrease in activity based on the context of the message. Frequently located at critical junctions in metabolic pathways, Acetyltransferases and their regulation have become attractive therapeutic targets to treat everything from insomnia to cancer.

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

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